Implementing a Data and Assessment Management System

2013 Nebraska Data Conference

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About the Ralston Public Schools

- Approximately 3,100 students
- Technology plan: Twelve long-term projects over the next five years
- The role of data in the district
  - Teacher induction and employee evaluation based on evidence of data-based decision making
  - Student achievement part of the principals' compensation package
  - Emphasis on 21st Century thinking skills

Initial Concerns

- Insufficient use of data
  - Limited access by teachers
  - Primarily focused on standardized assessments
  - Minimal use of local data
  - No visual representations; difficult to translate data into information that easily understood
  - Absence of longitudinal data
- Uneven knowledge base about data
- Poor implementation of prior system

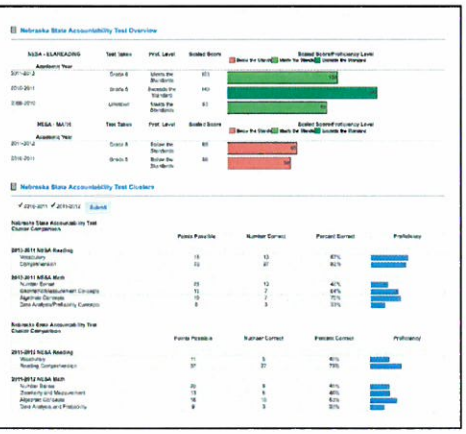
About DataDirector

- Managed by Riverside Publishing
- Combination of two systems
  - Data warehousing and analysis capabilities
  - Assessment management system
- Online assessment options
- Assessment item banks available
- Affordable: $5.25 per student
- Extremely flexible

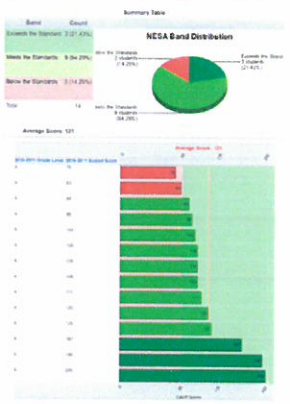
About DataDirector

- Data warehouse
  - Individual student profiles with longitudinal data (assessment, demographic, behavioral…etc.)
  - Custom and pre-built reports for warehoused data
  - Assessment data disaggregated on multiple levels (district, building, teacher, or student)
  - Teacher analysis by cluster, standard, or item
  - Student search feature allows reporting by multiple student characteristics

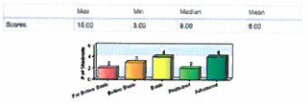
Sample Student Profile

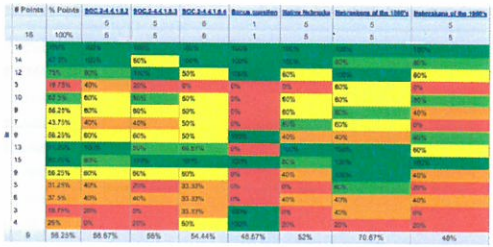


Sample Pre-built Assessment Reports



Sample Classroom Reports





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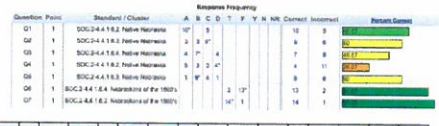
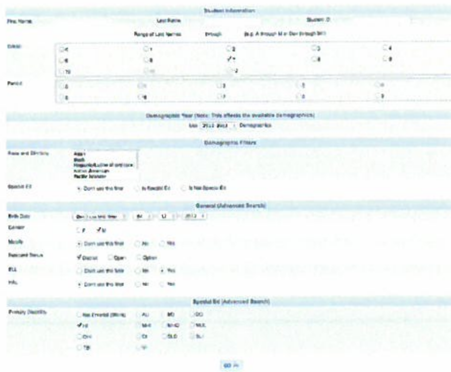


Question	Point	Standard / Cluster	A	B	C	D	T	F	Y	N	NR	Correct	Incorrect	Percent Correct
Q1	1	SOC.2-4.4.1.6.2: Native Nebraska	10*	3								10	3	76.92%
Q2	1	SOC.2-4.4.1.6.2: Native Nebraska	2	2	9*							9	6	60%
Q3	1	SOC.2-4.4.1.6.4: Native Nebraska	4	7*		4						7	8	46.67%
Q4	1	SOC.2-4.4.1.6.2: Native Nebraska	5	3	2	4*						4	11	26.67%
Q5	1	SOC.2-4.4.1.6.3: Native Nebraska	1	9*	4	1						9	6	60%
Q6	1	SOC.2-4.4.1.6.4: Nebraskans of the 1860's					2	13*				13	2	86.67%
Q7	1	SOC.2-4.4.1.6.2: Nebraskans of the 1860's					14*	1				14	1	93.33%

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15	Q16
A	C	B	D	B	F	T	T	F	T	D	B	C	C	A	Y
A*	C*	B*	D*	B*	F*	T*	T*	F*	T*	D*	B*	C*	C*	A*	Y*
A*	C*	B*	D*	B*	F*	T*	F	F*	T*	D*	B*	A	C*	A*	Y*
A*	C*	D	A	B*	F*	T*	T*	F*	T*	A	B*	C*	B	A*	Y*
C	A	D	B	C	T	T*	T*	T	T*	C	C	A	B	B	N
A*	C*	B*	C	C	F*	T*	T*	T	F	A	B*	C*	C*	A*	N
A*	C*	B*	A	A	F*	T*	T*	F*	F	A	B*	C*	B	D	N
A*	C*	B*	C	B*	F*	T*	F	F*	F	A	D	D	D	D	N
A*	B	A	B	B*	F*	T*	F	T	F	A	B*	C*	C*	A*	Y*
A*	C*	B*	D*	B*	F*	T*	T*	F*	T*	A	B*	C*	C*	D	N
A*	C*	B*	C	B*	F*	T*	T*	F*	F*	T*	D*	B*	C*	A*	Y*
C	A	A	D*	B*	F*	T*	T*	F*	T*	D*	A	B	A	A*	N
C	B	D	A	C	F*	T*	T*	F*	F	B	B*	B	B	B	N
A*	C*	A	A	D	F*	T*	F	T	F	C	D	A	C*	A*	N
C	A	D	B	C	F*	T*	T,F	T	F	A	C	B	D	B	Y*
C	B	A	A	B*	T	F	F	F*	F	D*	C	D	B	D	Y*
86.67%	60%	46.67%	26.67%	60%	86.67%	93.33%	60%	66.67%	46.67%	33.33%	60%	46.67%	46.67%	53.33%	46.67%

Sample Student Search



Sample Parent Letter (Spanish)

Ralston Public Schools - Reporte Del Alumno
2012-13 4th grade social studies Nebraska history test

Apreciable padre o tutor:
Ralston Public Schools administra exámenes rutinariamente que miden el progreso de Alyssa en la consecución de las Normas del contenido. Las normas describen lo que todos los alumnos deben saber y poder hacer en cada grado escolar.

Nombre del alumno	[redacted]
Escuela	[illegible] Elementary
Maestro(a)	Rupprecht, Jennifer
Periodo	N/A
Grado	4
Fecha del examen	Dec 21, 2012
# de respuestas correctas	10.00 / 16
% de respuestas correctas	63%
Versión	

La tabla a continuación indica las normas abarcadas en este examen.

El número de preguntas indica cuántas preguntas cubrieron cada norma.

La columna de respuestas correctas indica cuántas preguntas contestó correctamente su hijo(a) en cada norma.

¿Qué puedo hacer como padre/tutor para ayudar a Alyssa en el área evaluada?
*Repase este reporte con Alyssa, y hable con el maestro(a) de Alyssa si tiene alguna pregunta.
*Propicie un lugar tranquilo todos los días donde Alyssa pueda estudiar.
*Pregúntele a Alyssa cómo le va durante el año escolar.
*Revise que Alyssa esté terminando todos sus trabajos y tareas escolares a diario.

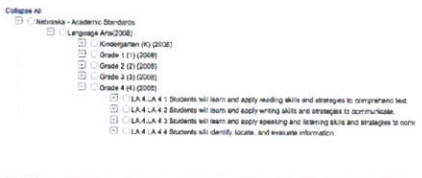
Norma/grupo	# de preguntas	# correctas
SOC 2.4.4.1.8.2: Identify members of Nebraska's Hall of Fame.	5	3.00 / 5
SOC 2.4.4.1.8.3: Identify accomplishments of prominent Nebraskans, e.g., Black Elk, Malcolm X, and Evelyn Sharp.	5	4.00 / 5
SOC 2.4.4.1.8.4: Identify groups that have impacted Nebraska's history, e.g., buffalo soldiers, cowboys, and sodbusters and immigrant settlers.	6	3.00 / 6
Bonus question.	1	0.00 / 1
Native Nebraska.	5	3.00 / 5
Nebraskans of the 1800's.	5	3.00 / 5
Nebraskans of the 1900's.	5	4.00 / 5

About DataDirector

- Assessment management system
  - Designed to encourage collaboration and use of common assessments
  - District, personal, and shared assessments
  - Multiple ways to capture data (traditional scanning, image capture, online assessments or manual input)
  - Assessment item banks linked to standards
  - Program feature allows grouping of students with similar characteristics

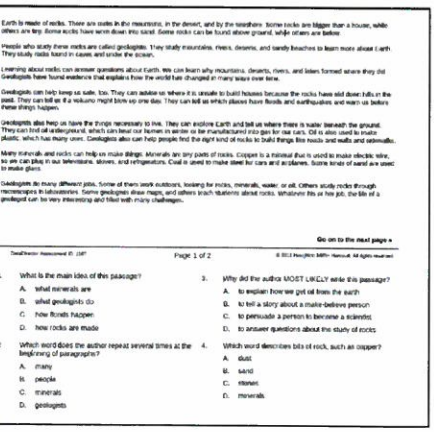
Sample Assessment Answer Sheet

Sample Nebraska Standard



Sample Item Bank Question

Sample Item Bank Assessment



Earth is made of rocks. There are rocks in the mountains, in the desert, and by the seashore. Some rocks are bigger than a house, while others are tiny. Some rocks have worn down into sand. Some rocks can be found above ground, while others are below.

People who study these rocks are called geologists. They study mountains, rivers, deserts, and sandy beaches to learn more about Earth. They study rocks found in caves and under the ocean.

Learning about rocks can answer questions about Earth. We can learn why mountains, deserts, rivers, and lakes formed where they did. Geologists have found evidence that explains how the world has changed in many ways over time.

Geologists can help keep us safe, too. They can advise us where it is unsafe to build houses because the rocks have slid down hills in the past. They can tell us if a volcano might blow up one day. They can tell us which places have floods and earthquakes and warn us before these things happen.

Geologists also help us have the things necessary to live. They can explore Earth and tell us where there is water beneath the ground. They can find oil underground, which can heat our homes in winter or be manufactured into gas for our cars. Oil is also used to make plastic, which has many uses. Geologists also can help people find the right kind of rocks to build things like roads and walls and sidewalks.

Many minerals and rocks can help us make things. Minerals are tiny parts of rocks. Copper is a mineral that is used to make electric wire so we can play in our televisions, stoves, and refrigerators. Coal is used to make steel for cars and airplanes. Some kinds of sand are used to make glass.

Geologists do many different jobs. Some of them work outdoors, looking for rocks, minerals, water, or oil. Others study rocks through microscopes in laboratories. Some geologists draw maps, and others teach students about rocks. Whatever his or her job, the life of a geologist can be very interesting and filled with many challenges.

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1. What is the main idea of this passage?
   - A. what minerals are
   - B. what geologists do
   - C. how floods happen
   - D. how rocks are made

2. Which word does the author repeat several times at the beginning of paragraphs?
   - A. many
   - B. people
   - C. minerals
   - D. geologists

3. Why did the author MOST LIKELY write this passage?
   - A. to explain how we get oil from the earth
   - B. to tell a story about a make-believe person
   - C. to persuade a person to become a scientist
   - D. to answer questions about the study of rocks

4. Which word describes bits of rock, such as copper?
   - A. dust
   - B. sand
   - C. stones
   - D. minerals

Before you begin…

- Assess your organization:
  - Is the district ready to change? By how much?
  - Are your principals ready to lead?
- Understand the district-wide implications
  - Technology (hardware and data management)
  - Curriculum, instruction, and assessment
  - Staff development
  - Parents and students

Primary Obstacles - District

- Fear among staff members
  - How will the data be used?
  - Changing expectations for teachers and administrators
- Apathy: "This too shall pass…"
- Training and support
  - Initial training
  - Ongoing support with multiple resources
  - Introducing the system to new staff members

Primary Obstacles - Riverside

- DataDirector is relatively new to Nebraska
  - What the heck is NeSA?
  - You haven't adopted the common core?!?
- Uploading standardized, NRT data is time consuming and cumbersome – at least for now
- Ongoing system upgrades (version 4.21.2)
- Alignment with other Riverside systems
- You are blazing a trail… you will need patience

Implications for Technology

- Is the hardware in place?
  - Bandwidth and Internet access
  - How will the data be entered?
  - Sufficient laptops / iPads for online assessments?
- Managing the system
  - Role of the data steward and/or system manager?
  - Who can access what? (Instructional Coaches?)
  - Duplication of existing systems (e.g., report cards)

Implications for C.I.A.

- Adopt the Common Core? (Item bank)
- Standards based curriculum
  - Does it match classroom instruction?
  - Does it match what's being assessed?
  - Does it match our students' needs?
- Differentiated instruction as the new norm
- Easier to implement common assessments
- Less time on grading, more time thinking

Implications for Staff Development

- Sole focus for the next two years - minimum
- Current knowledge base
  - Legal and ethical use of data (FERPA)
  - Basic statistical concepts and analysis skills
- Data as one piece of the puzzle
- Differentiated staff development options
- Staff development on differentiating instruction
- Data driven PLC groups

Implications for Parents & Students

- Rich, detailed conversations about student achievement and growth
- Longitudinal data to target areas of concern
- Data to guide course selection and potential career choices (student advisement)
- Expectations to differentiate instruction
- Student ownership of data: students are now a part of the instructional process

Lessons Learned

- Lay the foundation 6-12 months in advance
  - Discuss your current reality: Is the district ready to change? Are your principals ready to lead?
  - Discuss expectations and how you will monitor the implementation process
  - Begin pre-teaching (FERPA, basic data concepts…)
  - Establish a timeline with milestones and objectives
    - Classroom: First assessment & first student conversation
    - Building: First PLC meeting with a common assessment
    - District: First admin meeting focusing on local data

Lessons Learned

- Allow time to implement the initial set-up
- This is the only project for the next two years
- Clear communication with all departments
- Don't skimp on the technology your teachers will use to upload their data
- Overwhelm your staff with support
  - DataDirector consultants to assist principals
  - Online videos, FAQs, and resource guides
  - Emphasize utilizing Riverside support
  - DataDirector certification for your system manager